AMERICAN MUSEUM NOVITATES

Published by
Number 1249 THE AMERICAN MUSEUM OF NATURAL HISTORY January 13, 1944
New York City

MORE PHALANGIDA FROM MEXICO

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The present paper is a continuation of the studies by the authors on the phalangid fauna of Mexico (see Amer. Mus. Novitates, nos. 1163 and 1211, 1942). As has already been demonstrated, the phalangid fauna of Mexico is extremely rich in species and is relatively unknown taxonomically. A notable addition to the Mexican fauna is the fine cave phalangodid, *Chinquipellobunus osorioi*, new genus and species, which was found in three caves in Nuevo Leon.

The writers are indebted to Drs. C. Bolívar and F. Bonet of Mexico, D. F., for the opportunity to study much new material from widely separated parts of Mexico. They were ably assisted in the accumulation of these many new specimens by their colleagues, Drs. D. Peláez, B. Osorio, and M. Maldonado. In addition, the writers wish to acknowledge the receipt of a fine collection from Dr. Helmuth Wagner of Mexico, D. F.

All holotypes of new species are deposited in the collection of the American Museum of Natural History.

SUBORDER LANIATORES THORELL

PHALANGODIDAE Simon

Phalangodinae Roewer

CHINQUIPELLOBUNUS, NEW GENUS

Dorsum with five distinct areas, all dorsal areas and free tergites without median armature. Eye tubercle in the form of a rounded cone, slightly separated from the anterior median margin of the cephalothorax. Femur of the palpus without a median apical spine. Secondary sexual characteristics of the male in the enlarged chelicerae and in the spination of the femur of the fourth leg. Tarsal segments: 5-more than 6-6-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments. In one male specimen, there were 6 segments in the first tarsus.

GENOTYPE: *Chinquipellobunus osorioi*, new species.

Chinquipellobunus is related to *Metapellobunus* Roewer but differs in the number of tarsal segments.

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Chinquipellobunus osorioi, new species

Figures 4–9

Total length of body, 6.4 mm. Cephalothorax, 1.0 mm. Width of body at widest portion, 3.7 mm.

	I	II
Trochanter	0.7 mm.	0.8 mm.
Femur	3.1	4.7
Patella	1.1	1.4
Tibia	2.6	4.4
Metatarsus	4.2	6.0
Tarsus	2.2	5.8
Total	13.9 mm.	23.1 mm.

	III	IV
Trochanter	0.9 mm.	0.9 mm.
Femur	4.1	5.4
Patella	1.2	1.6
Tibia	3.1	4.2
Metatarsus	5.1	6.3
Tarsus	2.3	2.9
Total	16.7 mm.	21.3 mm.

Dorsum with five areas, the boundaries of which are parallel. First area without a median line. All areas thickly covered with tuberculations. A row of tubercles on the lateral margin of the dorsum. Cephalothorax with tuberculations which are more

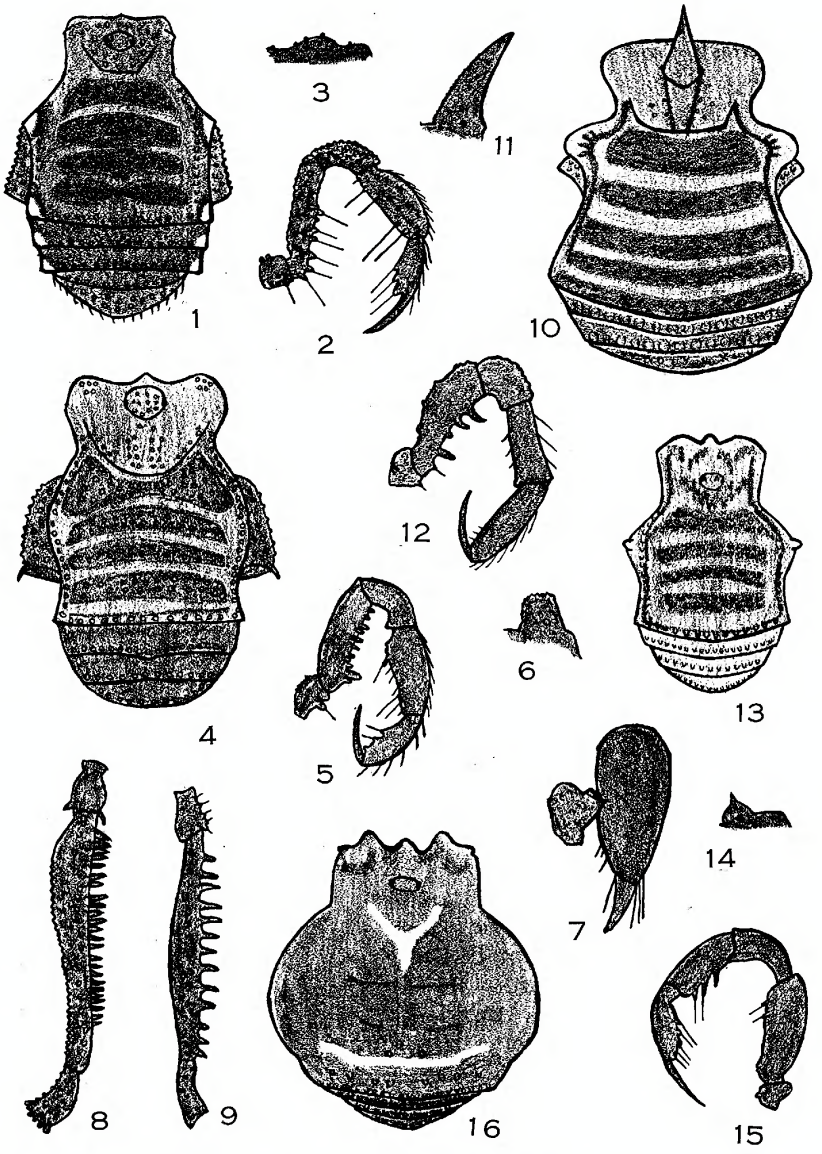

Fig. 1. *Monterella tuberculata*, new species, dorsal view of male.
Fig. 2. Idem, retrolateral view of palpus of male.
Fig. 3. Idem, lateral view of eye tubercle of male.
Fig. 4. *Chinquipellobunus osorioi*, new species, dorsal view of male.
Fig. 5. Idem, retrolateral view of palpus of male.
Fig. 6. Idem, lateral view of eye tubercle of male.
Fig. 7. Idem, retrolateral view of chelicera of male.
Fig. 8. Idem, dorsal view of trochanter, femur, and patella of fourth leg of male holotype.
Fig. 9. Idem, dorsal view of trochanter, femur, and patella of fourth leg of male paratype.
Fig. 10. *Paramitraceras granulatus* Cambridge, dorsal view of male.
Fig. 11. Idem, lateral view of eye tubercle of male.
Fig. 12. Idem, retrolateral view of palpus of male.
Fig. 13. *Karos barbarikos*, new species, dorsal view of female.
Fig. 14. Idem, lateral view of eye tubercle of female.
Fig. 15. Idem, retrolateral view of palpus of female.
Fig. 16. *Boneta bilineata*, new species, dorsal view of male.

numerous just posterior to the eye tubercle and at the lateral margins. Eye tubercle in the form of a rounded cone, thickly covered with tuberculations; eyes at base with an apparently defective retina. Eye tubercle separated from the anterior margin of the cephalothorax by only a narrow space. Venter and coxae granulate, a transverse row of tubercles across each free sternite. Anal operculum with scattered tubercles. Third coxa with both anterior and posterior rows of lateral teeth. First coxa with a transverse row of large tubercles. All coxae and trochanters thickly covered with tubercles. Spiracles visible. Fourth coxa widened distinctly, visible from above, with a dorsal apical spine.

Legs: clothed throughout with hairs. Femora, patellae, and tibiae with granulations. Femur of the third leg somewhat enlarged and curved, with several rows of larger tubercles. Femur of fourth leg enlarged, with the large row of spines on the retrolateral margin. There is some variation among individuals in the number of spines present. Trochanter and tibia of fourth leg with two large distal spines. Metatarsi of legs not divided into astragulus and calcaneus. Tarsal segments: 5-12-6-6. One male specimen, among the many examined, had 6 segments in the first tarsus. Distitarsus of first tarsus with 2 segments; of second, 3 segments.

Palpus: trochanter, 0.9 mm. long; femur, 1.9; patella, 1.3; tibia, 1.3; and tarsus, 1.1. Total length, 6.5 mm. Palpus armed retrolaterally as in figure 5. There is a slight variation in the number of small spines on the tibia. Prolaterally: femur and patella unarmed, tibia and tarsus with 3 spines each. Entire dorsal portion of femur granulate.

Chelicera: enlarged, as in figure 7. Proximal segment covered with granulations. There is an occasional specimen with a somewhat smaller chelicera.

Entire body and all appendages except the metatarsi and tarsi of the legs reddish brown. Metatarsi and tarsi yellowish.

FEMALE: Total length of body, 5.3 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 3.2 mm.

Similar in appearance to male, but with the chelicera reduced in size and with less spination on the femur of the fourth leg.

TYPE LOCALITY: Male holotype and male and female paratypes from Gruta del Carrizal, Nuevo Leon, July 16, 1942 (C. Bolívar, B. Osorio, D. Peláez, and F. Bonet). Additional specimens from Gruta del Garcia, Nuevo Leon, July 14, 1942, and Gruta Palmito, Bustamente, Nuevo Leon, July 17, 1942 (C. Bolívar, B. Osorio, D. Peláez, and F. Bonet, and Maldonado). Paratypes deposited in the collections of the American Museum of Natural History, Field Museum of Natural History, and in the personal collections of Drs. C. Bolívar and F. Bonet.

KAROS, NEW GENUS

Dorsum with five areas, the boundaries of which are parallel. First area without a median line. Dorsal scute and free tergites without median armature. Eye tubercle removed from the anterior margin of the cephalothorax, with paired spines. Tarsal segments: 4-7-6-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments. Femur of palpus with a median apical tubercle.

GENOTYPE: *Karos barbarikos*, new species.

Karos is related to *Bishopella* Roewer, but has a different number of tarsal segments, lacks the elevation of the second area, and has a pair of small spines over the eyes.

Karos barbarikos, new species

Figures 13–15

FEMALE: Total length of body, 2.5 mm. Cephalothorax, 0.8 mm. Width of body at widest portion, 1.7 mm.

	I	II
Trochanter	0.3 mm.	0.4 mm.
Femur	0.9	1.4
Patella	0.4	0.5
Tibia	0.6	1.1
Metatarsus	1.1	1.2
Tarsus	0.6	1.2
Total	3.9 mm.	5.8 mm.

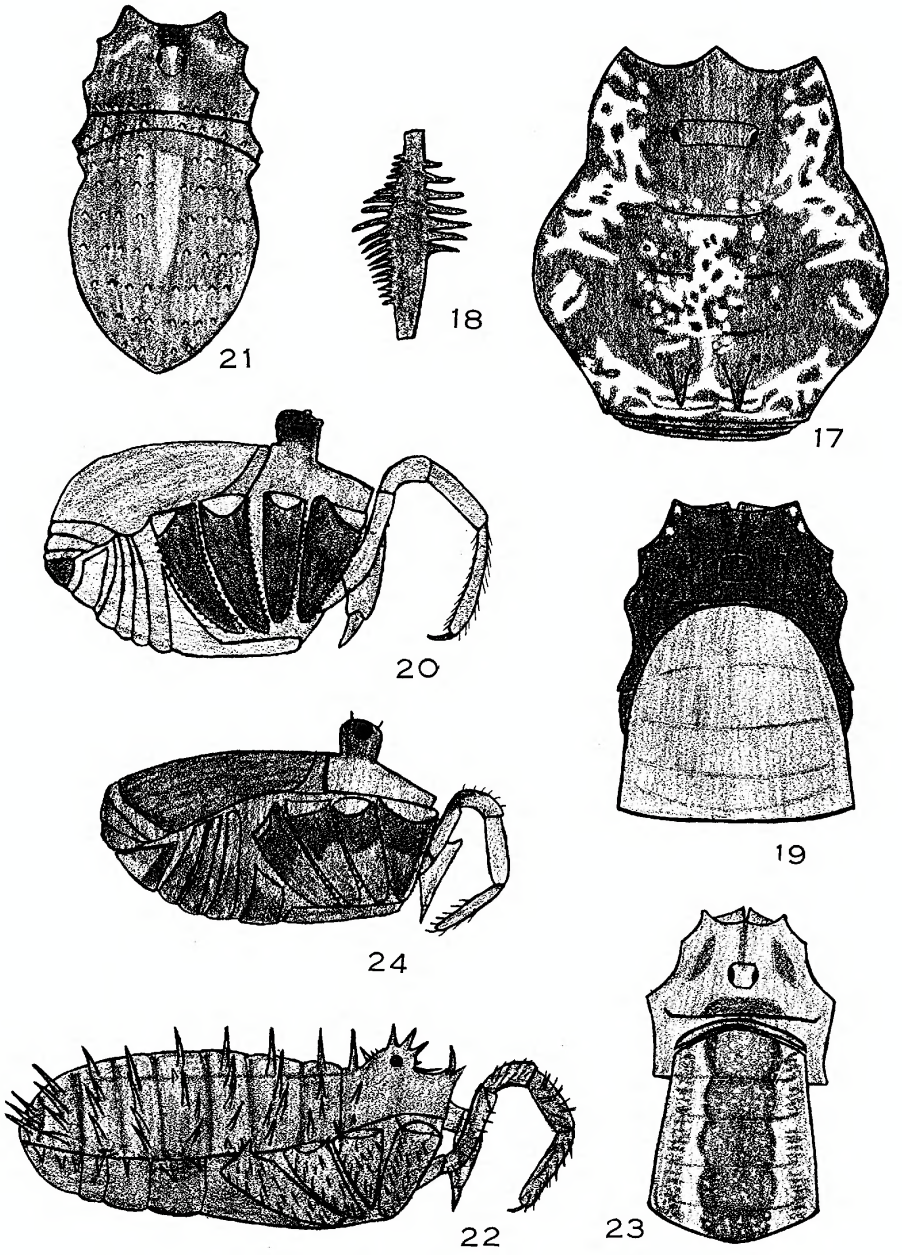

Fig. 17. *Bivonones gertschi* Goodnight and Goodnight, dorsal view of male.
Fig. 18. Idem, dorsal view of femur of fourth leg of male.
Fig. 19. *Romerella bicolor*, new species, dorsal view of male.
Fig. 20. *Prionostemma wagneri*, new species, lateral view of male.
Fig. 21. *Metopilio albispinulatus*, new species, dorsal view of male.
Fig. 22. *Metopilio multispinulatus*, new species, lateral view of male.
Fig. 23. *Leiobunum desertum*, new species, dorsal view of male.
Fig. 24. *Romerella catharina*, new species, lateral view of male.

	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	0.9	1.4
Patella	0.4	0.4
Tibia	0.9	1.2
Metatarsus	1.1	1.6
Tarsus	0.8	1.0
Total	4.5 mm.	6.0 mm.

Dorsum with five distinct areas, the boundaries of which are parallel. First area without a median line. First four dorsal areas thickly covered with tubercles. Fifth area and free tergites each with a transverse row of tubercles. Dorsal scute and free tergites without median armature, but with the median portion of the second, third, and fourth areas slightly elevated and with the tubercles very slightly enlarged. A lateral row of tubercles along the abdominal scute. Just posterior to the cephalothorax, the abdominal scute is somewhat widened; on either side of this lateral bulge is a light-colored tubercle. Cephalothorax relatively narrow, covered with granulations. Eye tubercle in the median portion, low, eyes at the base. A very small spine over each eye. Venter and coxae granulate, each free sternite with a small transverse row of tubercles. Genital operculum with thickly scattered tubercles. Spiracles visible.

Legs: clothed throughout with scattered hairs. All segments except the tarsus with numerous tubercles. These tubercles are especially large on the basal segments of the fourth leg. Metatarsi of all legs not divided into astragulus and calcaneus. Tarsal segments: 4-7-6-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments.

Palpus: trochanter, 0.4 mm. long; femur, 0.5; patella, 0.4; tibia, 0.4; and tarsus, 0.4. Total length, 2.1 mm. Armed retrolaterally as a figure 15. Prolaterally there is an apical median tubercle on the femur; two apical median tubercles and one small median tubercle on the patella, and four tubercles on the tibia and tarsus.

Chelicera: normal, proximal segment very slightly thickened, scattered hairs present.

Dorsum reddish brown, with dark brown mottlings on the cephalothorax. Central portion of the dorsal areas very dark brown, also lateral dark brown stripe on either side. Free tergites dark. Venter, coxae, and appendages reddish brown with much dark brown mottling. The entire animal is quite dark.

TYPE LOCALITY: Female holotype from Chapulhuacan, Hidalgo, May 10, 1942.

MONTERELLA, NEW GENUS

Dorsum with five distinct areas; the boundaries of the first and second areas are parallel. First area without a median line. All dorsal areas and free tergites without median armature. Eye tubercle removed from the anterior margin of the cephalothorax, unarmed. The femur of the palpus with a median apical spine. Tarsal segments: 4-more than 6-6-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments.

GENOTYPE: *Monterella tuberculata*, new species.

This genus is related to *Bishopella* Roewer, but has a different number of tarsal segments and lacks the elevation of the second area.

Monterella tuberculata, new species

Figures 1–3

MALE: Total length of body, 4.4 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.5 mm.

	I	II
Trochanter	0.4 mm.	0.4 mm.
Femur	1.6	2.5
Patella	0.8	1.0
Tibia	1.4	2.0
Metatarsus	1.7	2.2
Tarsus	1.2	2.6
Total	7.1 mm.	10.7 mm.

	III	IV
Trochanter	0.6 mm.	0.5 mm.
Femur	2.2	3.2
Patella	0.8	1.0
Tibia	1.7	2.3
Metatarsus	2.2	2.9
Tarsus	1.3	1.3
Total	8.8 mm.	11.2 mm.

Dorsum with five distinct areas, without median armature. First area without a median line, but the fourth area divided into two halves by a median furrow.

Boundaries of first and second, but not third and fourth, areas parallel. Median portions of first four areas thickly covered with tubercles. A transverse row of tubercles across the fifth area and each free tergite, and a light-colored tubercular bulge at the posterior lateral portion of the fifth area and first and second free tergites. A lateral row of tubercles on either side of the abdominal scute. On either side, just posterior to the cephalothorax, is a slight marginal bulge on which is located a light-colored tubercle. Eye tubercle in the median portion of the cephalothorax, without dorsal armature, low, eyes at the base. Scattered tubercles over the cephalothorax and the eye tubercle. Venter and coxae thickly covered with tuberculations. A transverse row of tuberculations across each free sternite. Spiracles hidden by the fourth coxae which are slightly expanded laterally.

Legs: clothed throughout with hairs. Trochanters, femora, and tibiae with numerous tuberculations which are larger on the fourth leg. Metatarsi not divided into astragulus and calcaneus. Tarsal segments: 4-7-6-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments.

Palpus: trochanter, 0.4 mm. long; femur, 1.3; patella, 0.9; tibia, 1.1; and tarsus, 0.8. Total length, 4.5 mm. All segments but the tarsus covered with tuberculations. Palpus armed retrolaterally as in figure 2. Prolaterally, the femur has a median apical spine, the patella has three spine bearing tubercles at the distal half, the tibia has four, and the tarsus has three.

Chelicera: normal, clothed throughout with tuberculations.

Dorsum light reddish brown, tuberculations slightly darker. Tuberculations at the lateral portion of the fifth area and first and second free tergites and at the bulge at the margin of the first area, yellowish. Venter and coxae concolorous with the dorsum. Appendages, except for the fourth leg, yellowish. Fourth leg reddish brown.

TYPE LOCALITY: Male holotype from Chipinque, Monterrey, Nuevo Leon, July 15, 1942 (D. Peláez, C. Bolívar, F. Bonet, and B. Osorio).

Paramitraceras granulatus Cambridge

Figures 10–12

Paramitraceras granulatus CAMBRIDGE, 1904, Biol. Centr. Amer., Arach., vol. 2, p. 474, pl. 54, figs. 3, 3a, 3b. ROEWER, 1923, Die Weberknechte der Erde, p. 117.

MALE: Total length of body, 6.2 mm. Cephalothorax, 2.0 mm. Width of body at widest portion, 5.0 mm.

	I	II
Trochanter	0.7 mm.	0.6 mm.
Femur	2.3	3.6
Patella	1.1	1.4
Tibia	1.9	2.9
Metatarsus	2.1	3.7
Tarsus	1.3	2.2
Total	9.4 mm.	14.4 mm.

	III	IV
Trochanter	0.8 mm.	0.9 mm.
Femur	3.0	3.8
Patella	1.1	1.5
Tibia	2.3	2.9
Metatarsus	3.0	4.3
Tarsus	1.5	1.8
Total	11.7 mm.	15.2 mm.

Dorsum with five distinct areas, the boundaries of which are parallel. Each area thickly covered with tuberculations. Fifth area and free tergites, each with a transverse row of tubercles. First area without a median line. No median armature on any of the dorsal areas. The lateral portion of the abdomen in the region of the first area expanded into a rounded projection. Cephalothorax with a few tubercles just posterior to the eye tubercle. Eye tubercle on the anterior margin of the cephalothorax, in the form of a cone, wide at the base. Eye tubercle slants anteriorly, eyes at the base, scattered tubercles present. Venter and coxae tuberculate. Spiracle visible. A transverse row of tubercles across each free sternite. Anal operculum with scattered tubercles. First coxa with a transverse row of larger hair-tipped tubercles. Third coxa with lateral rows of teeth on the anterior and posterior margins. Fourth coxa strongly tuberculate, slightly widened laterally.

Legs: clothed throughout with hairs, all segments but the tarsi covered with

tuberculations which are strongest on the femora. Tarsal segments: 3-4-5-5. Distitarsus of first tarsus with 2 segments; of second, 2 segments.

Palpus: trochanter, 0.8 mm. long; femur, 2.0; patella, 1.0; tibia, 1.5; and tarsus, 1.4. Total length, 6.7 mm. Palpus tuberculate, heavy, armed retrolaterally as in figure 12. Prolaterally the femur and patella are unarmed; the tibia has a distal bifid projection which is slightly larger than the corresponding retrolateral projection; tarsus with a spine at the proximal half.

Chelicera: enlarged. Distal segment with a slight dorsal elevation. Proximal segment tuberculate.

Entire animal reddish brown with darker brown mottlings. Appendages concolorous except for the tarsi of the legs which are light.

RECORD: Male from Triunfo, Chiapas, April, 1942 (H. Wagner).

COSMETIDAE Simon

Cosmetinae Cambridge

BIVONONES GOODNIGHT AND GOODNIGHT

Bivonones GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1163, pp. 2–3, figs. 14, 15.

Paired tubercules on the first and second areas, paired spines on the third. Remaining areas and free tergites unarmed. Tarsal segments: 6-remaining more than 6. Distitarsi of both first and second tarsi with 3 segments. Basal segments of third and fourth legs enlarged in the male.

GENOTYPE: *Bivonones gertschi* Goodnight and Goodnight.

Additional material has enabled the writers to understand better the characteristics of this genus and species.

Bivonones gertschi Goodnight and Goodnight

Figures 17 and 18

Bivonones gertschi GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1163, pp. 2–3, figs. 14, 15.

MALE: Total length of body, 6.9 mm. Cephalothorax, 3.0 mm. Width of body at widest portion, 6.5 mm.

	I	II
Trochanter	0.6 mm.	0.8 mm.
Femur	4.1	7.8
Patella	1.1	1.4
Tibia	2.7	6.0
Metatarsus	4.1	8.1
Tarsus	2.6	5.1
Total	15.2 mm.	29.2 mm.
	III	IV
Trochanter	1.0 mm.	1.1 mm.
Femur	5.9	6.3
Patella	1.9	1.9
Tibia	3.5	5.0
Metatarsus	5.9	7.7
Tarsus	3.0	3.2
Total	21.2 mm.	25.2 mm.

Dorsum finely granulate, a median pair of tubercles on the first and second areas and an additional tubercle laterad to each of the paired tubercles. Paired spines on the third area, a tubercle laterad and slightly anterior to each spine. Remaining areas and free tergites unbedecked. A transverse row of small tubercles across each free tergite. Scattered tubercles on the anal operculum. Eye tubercle large, a few small granulations over each eye. Venter and coxae covered with scattered tubercles and hairs. In addition, a transverse row of larger tubercles across the first coxae. A transverse row of tubercles across each free sternite.

Legs: with scattered hairs, tubercles present on the basal segments, particularly on the third and fourth legs. Basal segments of third and fourth legs enlarged. Fourth femur armed as in figure 18. The longer row of spines on the prolateral margin, a smaller row curved. Distal portion of third and fourth metatarsi slightly enlarged. Tarsal segments: 6-13-8-10. Distitarsi of tarsi of both first and second legs with 3 segments. The spines on the femur of the fourth leg of the holotype were not fully developed.

Palpus: trochanter, 1.3 mm. long; femur, 2.1; patella, 1.4; tibia, 1.9; and tarsus, 1.2. Total length, 7.9 mm. Palpus characteristically flattened, ventral teeth on the femur.

Chelicera: enlarged, proximal segment enlarged. Distal segment elevated.

Dorsum reddish brown, dark, with white markings as in figure 17. Tubercles and

spines yellowish, a few scattered white spots on the free tergites and a large irregular white dot on the anal operculum. Venter, coxae, and chelicerae dark, legs and palpus light.

FEMALE: Total length of body, 7.2 mm. Cephalothorax, 2.7 mm. Width of body at widest portion, 7.0 mm.

Similar in appearance to the male, but with reduced chelicerae. Also the female lacks the spines of the fourth leg.

RECORD: Male and females from El Vergel, Chiapas, 200 meters, October, 1939 (C. Bolívar and D. Peláez).

BONETA, NEW GENUS

Dorsal scute with five areas. Third area with median tubercles. Remaining areas and free tergites without median armature. Third and fourth legs not enlarged over the first and second. Tarsal segments: 5-remaining more than 6. Distitarsi of both first and second tarsi with 3 segments.

GENOTYPE: *Boneta bilineata*, new species.

Boneta is related to *Poala* Goodnight and Goodnight, but differs in the number of tarsal segments.

Boneta bilineata, new species

Figure 16

MALE: Total length of body, 4.2 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 3.8 mm.

	I	II
Trochanter	0.5 mm.	0.5 mm.
Femur	1.8	3.3
Patella	0.6	0.6
Tibia	1.2	2.4
Metatarsus	1.8	3.2
Tarsus	1.3	2.8
Total	7.2 mm.	12.8 mm.

	III	IV
Trochanter	0.4 mm.	0.5 mm.
Femur	2.8	3.1
Patella	0.8	1.2
Tibia	1.8	2.6
Metatarsus	2.6	3.8
Tarsus	1.4	1.5
Total	9.8 mm.	12.7 mm.

Dorsum smooth, finely granulate. A pair of very low tubercles on the third area; in some specimens, they can be seen only with difficulty. A row of larger granulations present on the fourth area. Fifth area and each free tergite with a transverse row of tubercles. Venter and coxae finely granulate. A transverse row of small tubercles across each free sternite. Anal operculum with scattered tuberculations. Lateral portions of the fourth coxa tuberculate. A few lateral teeth present on coxa III.

Legs: clothed throughout with hairs. Femora, patellae, and tibiae with small tuberculations. Basal segments of third and fourth legs not enlarged. A few small tubercles at the distal portion of the trochanter of the fourth leg. Tarsal segments: 5-9-7-7. Distitarsi of both first and second tarsi with 3 segments. Basitarsus of first leg slightly enlarged.

Palpus: trochanter, 0.6 mm. long; femur, 0.8; patella, 0.5; tibia, 0.8; and tarsus, 0.4. Total length, 3.1 mm. Palpus characteristically flattened, with ventral teeth on the femur.

Chelicera: normal, with a few tuberculations on the proximal segment.

Dorsum reddish brown, with darker brown mottlings on the cephalothorax and the lateral and posterior portions of the scute. A small white V present at the junction of the cephalothorax and the abdomen. The arms of the V extend only a short distance. A transverse white line is present just posterior to the tubercles of the third area. A broken median line is sometimes present. Venter, coxae, and appendages reddish brown.

FEMALE: Total length of body, 4.5 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 3.3 mm.

Similar in appearance to male.

TYPE LOCALITY: Male holotype and male and female paratypes from Chipinque, Monterrey, Nuevo Leon, July 15, 1942 (D. Peláez, C. Bolívar, F. Bonet, and B. Osorio). Paratypes deposited in the collections of the American Museum of Natural History, Field Museum of Natural History, and in the personal collection of Drs. C. Bolívar and F. Bonet.

Poala granulosa Goodnight and Goodnight

Poala granulosa GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, pp. 6, 7, fig. 13.

RECORD: Zempoala, Morelos, 2800 meters, May 31, 1942 (C. Bolívar).

SUBORDER PALPATORES THORELL

PHALANGIIDAE Simon

Leiobuninae Banks

Leiobunum desertum, new species

Figure 23

MALE: Total length of body, 3.3 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 1.7 mm. Length of femora: I, 6.1 mm.; II, 9.4 mm.; III, 6.1 mm.; IV, 8.8 mm.

Dorsum smooth, eye tubercle slightly canaliculate, smooth above. Supracheliceral lamella in the form of an expanded plate. Venter and coxae smooth; lateral teeth on the anterior margins of coxae I to III and a few on the anterior margin of coxa IV. Teeth present on the posterior margin of coxa IV.

Legs: clothed throughout with scattered hairs and with a few scattered small black spines on the basal segments.

Palpus: trochanter, 0.4 mm. long; femur, 0.9; patella, 0.5; tibia, 0.6; and tarsus, 1.1. Total length, 3.5 mm. Palpus clothed throughout with hairs. A few scattered small black spines on all segments. Patella without apophyses.

Chelicera: normal, with scattered hairlike spines.

Dorsum brownish, with a darker brown median stripe outlined in a lighter color. Eye tubercle with a lighter median stripe, darker brown mottlings on the median portion of the cephalothorax. Entire dorsum thickly covered with light punctations. Venter and coxae light, with brownish mottlings. Trochanters and bases of femora with much darker brown markings, thus appearing to contrast with the coxae. Remainder of legs brownish, somewhat lighter than the trochanters. Palpi light, with darker brown markings on the dorsal portion, particularly on the femur and patella. Chelicerae concolorous with the venter.

FEMALE: Total length of body, 3.7 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 1.8 mm.

Identical in appearance with the male.

TYPE LOCALITY: Male holotype and male and female paratypes from Santa Rosa, D. F., November 24, 1941 (H. Wagner). Additional paratypes from Desierto de los Leones, D. F., September 18, 1941 (H. Wagner). Paratypes deposited in the collections of the American Museum of Natural History and in Field Museum of Natural History.

This species is related to *L. potosum* Goodnight and Goodnight, differing in the dorsal color pattern.

Leiobunum potosum Goodnight and Goodnight

Leiobunum potosum GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 9, fig. 21.

RECORD: Santa Rosa, D. F., November 20, 1942.

Paranelima lutzi Goodnight and Goodnight

Glabrurus lutzi GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1163, p. 14, fig. 21.

Paranelima lutzi GOODNIGHT AND GOODNIGHT, 1942, Amer. Mus. Novitates, no. 1211, p. 11.

RECORD: Crater del Nevado de Toluca, Mexico, 4100 meters (C. Bolívar).

Phalangiinae Simon

Metopilio albispinulatus, new species

Figure 21

MALE: Total length of body, 3.6 mm. Cephalothorax, 1.0 mm. Width of body at widest portion, 2.2 mm.

	I	II
Trochanter	0.4 mm.	0.4 mm.
Femur	2.2	3.9
Patella	0.8	1.2
Tibia	1.9	3.3
Metatarsus	2.0	2.3
Tarsus	4.0	9.1
Total	11.3 mm.	20.2 mm.

	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	1.9	3.2
Patella	0.8	0.9
Tibia	1.7	2.2
Metatarsus	2.2	3.2
Tarsus	4.5	6.0
Total	11.5 mm.	15.9 mm.

Dorsum finely granulate, thickly covered with minute black granulations. Eye tubercle low, with several very minute spines scattered over the dorsal portion, not canaliculate. Median anterior elevation of the cephalothorax with a few small spinules on either side and an unspined median line. A transverse row of from 8 to 12 small spinules across each of the abdominal segments and the posterior two thoracic segments. The spines of the same height across the entire row. The venter and coxae with scattered, small, spine-like hairs. Coxae without lateral teeth.

Legs: basal segments, femora, patellae, and tibiae of legs I and III somewhat enlarged over II and IV. A few small spines present on the basal segments of legs II and IV. These are black. Larger scattered spines present on the first and third legs, particularly at the distal portions of the segments. Metatarsi of the second and fourth legs, each with one false articulation; tibiae also with one.

Palpus: trochanter, 0.3 mm. long; femur, 0.6; patella, 0.4; tibia, 0.6; and tarsus, 1.1. Total length, 3.0 mm. Palpus clothed throughout with hairs. Spines present on the ventral portion of all segments.

Chelicera: normal, thickly clothed with hairs.

Dorsum dark brown, with some lighter mottlings. A light, narrow, brown median stripe crosses the eye tubercle and extends to the median portion of the abdomen where it becomes obscure. Transverse rows of dorsal spines light, giving a punctate appearance. Venter light brown, with dark brown mottlings. Coxae dark. Legs dark reddish brown. Palpi and chelicerae dark.

FEMALE: Total length of body, 4.2 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 2.2 mm.

Identical with male, but lighter in color, obliterating the distinct dorsal stripe of the darker colored male.

TYPE LOCALITY: Male holotype and female paratypes from Cuernavaca, Morelos, September, 1941 (H. Wagner). Paratypes in the collection of the American Museum of Natural History.

M. albispinulatus differs from other species of the genus *Metopilio* by having the median line of the median elevation of the cephalothorax unspined, and in having uniformly sized spines.

Metopilio multispinulatus, new species

Figure 22

MALE: Total length of body, 3.2 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.0 mm.

	I	II
Trochanter	0.5 mm.	0.5 mm.
Femur	1.8	3.9
Patella	0.7	1.0
Tibia	1.8	3.5
Metatarsus	1.9	2.5
Tarsus	2.4	5.1
Total	9.1 mm.	16.5 mm.

	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	1.9	2.8
Patella	0.6	0.7
Tibia	1.5	1.9
Metatarsus	2.2	2.8
Tarsus	2.4	3.2
Total	9.0 mm.	11.8 mm.

Dorsum elongate, thickly covered with rough granulations. Anterior margin of the cephalothorax with a median elevation which has three or four large, and several small, spines on either side. A median smooth line between these groups of spines. Eye tubercle rounded, not canaliculate, with five or six large spines and several small ones irregularly arranged on the dorsal surface. Posterior to the eye tubercle is a transverse row of eight irregularly spaced spines. The last segment of the

cephalothorax and each abdominal segment with a transverse row of 8 to 15 large, irregularly spaced spines. The spines of the posterior segments of the abdomen are somewhat larger; although the spines are more or less arranged in rows, there is much variation. On the dorsal half of the anal operculum are large spines. Venter smooth, with a few small, scattered, black spines. Genital operculum and coxae thickly covered with small black spines. Second maxillary lobes slanted and spined. Coxae without lateral teeth.

Legs: clothed throughout with hairs. Femora, patellae, and tibiae much heavier than the metatarsi and tarsi. First and third legs slightly heavier than the second and fourth. Trochanters, femora, patellae, and tibiae of all legs thickly armed with large, black-tipped spines. A few larger light spines at the distal portion of these segments. Tibiae somewhat angular. Metatarsus of second leg with 2 false articulations.

Palpus: trochanter, 0.4 mm. long; femur, 0.4; patella, 0.3; tibia, 0.4; and tarsus, 0.6. Total length, 2.1 mm. Palpus clothed throughout with hairs, all segments except the tarsus thickly covered with small black spines. Tarsal claw small and smooth.

Chelicera: normal, armed with small black spines.

Dorsum brownish, mottled, eye tubercle dark brown with an indefinite lighter median stripe. Median portion of the abdomen with indefinite lighter marking beginning as a very narrow stripe just posterior to the eye and gradually widening to the posterior portion of the abdomen. Median spines of the last two rows light. Venter and coxae light brown except for small black spines. A series of pale spots on the sternites. Trochanters, metatarsi, and tarsi of legs light brown. Remainder of legs darker brown. Palpus light brown, mottled dorsally with darker. Chelicerae light, with black-tipped claws.

FEMALE: Total length of body, 3.9 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.5 mm.

Identical in appearance with the male.

TYPE LOCALITY: Male holotype and female paratypes from Oaxtepec, Morelos, May 17, 1942 (C. Bolívar). Paratypes in the collection of the American Museum of Natural History and in that of the collector.

Gagrellinae Thorell

Prionostemma wagneri, new species

Figure 20

MALE: Total length of body, 2.1 mm. Cephalothorax, 0.9 mm. Width of body at widest portion, 1.6 mm. Length of femora: I, 10.2 mm.; II, 17.2 mm.; III, 9.5 mm.; IV, 13.7 mm.

Dorsum smooth, eye tubercle canaliculate with a few very small tubercles over the anterior portion of each carina. Supracheliceral lamella in the form of an expanded plate with a sharp spine at the median border. Dorsum somewhat arched. Venter and coxae granulate. Coxae with scattered larger granulations. Anterior margins of coxae I to IV and posterior margin of coxa IV with three-pronged teeth.

Legs: long, hair-like, covered with scattered hairs. Nodules: 0-3-0-1. Nodules small. Metatarsi with false articulations.

Palpus: trochanter, 0.4 mm. long; femur, 0.9; patella, 0.4; tibia, 0.4; and tarsus, 1.1. Total length, 3.2 mm. Palpus with a few scattered hairs. A ventral row of very small spines on the femur. Patella with a very short median apical apophysis.

Chelicera: normal, with scattered hairs.

Dorsum golden, shining, with a few indistinct darker mottlings. A spot of dark brown on the median portion of the free tergites and anal operculum. Eye tubercle, except at the base, dark brown to black. Venter and genital operculum golden. Coxae, trochanters, and bases of femora, dark brown to black, contrasting vividly. Remainder of legs brownish. Palpus and chelicera yellowish; cheliceral claws tipped with black.

FEMALE: Total length of body, 3.0 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 2.1 mm.

Identical in appearance with male.

TYPE LOCALITY: Male holotype and male and female paratypes from Prusia,

Chiapas, 1000 meters, March 4, 1942 (H. Wagner). Paratypes in the collection of the American Museum of Natural History. Another paratype from Atoyac, Vera Cruz, July 14, 1941 (H. Dybas), in the collection of Field Museum of Natural History.

Prionostemma wagneri differs from other species of the genus in the color of its dorsum.

Romerella bicolor, new species

Figure 19

MALE: Total length of body, 3.5 mm. Cephalothorax, 1.0 mm. Width of body at widest portion, 2.0 mm. Length of femora: I, ?; II, 21.0 mm.; III, 11.1 mm.; IV, 14.4 mm.

Dorsum smooth, eye tubercle slightly canaliculate, constricted at the base, smooth above. Eye tubercle towards the posterior portion of the cephalothorax. Supracheliceral lamella in the form of an expanded plate. Venter and coxae granulate. Some lateral teeth present on the anterior and posterior margins of all coxae.

Legs: long and slender, a few scattered hairs throughout. Metatarsi with false articulations. Nodules: ?-4-0-1.

Palpus: trochanter, 0.3 mm. long; femur, 1.0; patella, 0.6; tibia, 0.6; and tarsus, 1.3. Total length, 3.8 mm. Palpus clothed throughout with hairs, a few very small tubercles on the ventral portion of the femur. Patella without an apophysis.

Chelicera: normal, clothed throughout with hairs.

Cephalothorax and eye tubercle dark, shining metallic, a few light spots at the anterior median margin of the cephalothorax. Dorsal portion of the abdomen golden, some darker brown flecks present. Posterior segments with a few indefinite dark spots between them. Free sternites brownish. Genital operculum darker brown. Coxae, trochanters, and bases of femora very dark brown to black. Remainder of legs dark brown, but lighter than the trochanters. Palpus white, chelicera white except for the black tips on the claws. Anterior mouth parts white. This white anterior portion of the animal contrasts strongly with the remainder of the body.

TYPE LOCALITY: Male holotype from Catharinas, Chiapas, 1400 meters, May 10, 1942 (H. Wagner).

Romerella bicolor differs markedly from the other species of the genus in the distinctive color pattern of the dorsum.

Romerella catharina, new species

Figure 24

MALE: Total length of body, 3.4 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 1.6 mm. Length of femora: I, 12.7 mm.; II, 22.5 mm.; III, 12.7 mm.; IV, 13.9 mm.

Dorsum finely granulate, eye tubercle towards the posterior portion of the cephalothorax, slightly canaliculate, smooth above, constricted at the base. Supracheliceral lamella in the form of an expanded plate. Venter and coxae finely granulate. A few lateral teeth present on the anterior and posterior margins of all coxae. These are very small and difficult to observe.

Legs: long and slender, clothed throughout with hairs. Small black spines on the femora. Metatarsi with false articulations. Nodules: 0-4-0-1.

Palpus: trochanter, 0.4 mm. long; femur, 1.3; patella, 0.4; tibia, 0.7; and tarsus, 1.1. Total length, 3.9 mm. Palpus clothed throughout with hairs, a few small spines present on the ventral portion of the femur. Patella without an apophysis.

Chelicera: normal, with the basal portion of the last segment slightly elevated. Clothed throughout with hairs.

Dorsum brownish, more or less mottled darker and lighter, metallic, giving a shiny appearance. Eye tubercle concolorous except for a darker ring around each eye. Venter and coxae very dark brown. Distal portions of the coxae, trochanters, and the bases of the femora almost black, remainder of the legs brown with some lighter mottlings. Palpus yellowish with some darker mottlings on the distal portion of the femur and on the patella. Chelicera and frontal region yellowish, tips of cheliceral claws black.

FEMALE: Total length of body, 6.1 mm. Cephalothorax, 2.1 mm. Width of body at widest portion, 3.3 mm.

Similar in appearance to male.

TYPE LOCALITY: Male holotype and female paratypes from Catharina, Chiapas, May 4, 1942 (H. Wagner). Paratypes in the collection of the American Museum of Natural History.

Romerella catharina differs from the other members of the genus in its distinctive color pattern.